

IN THE CLAIMS:

This claim listing replaces all prior versions.

1 (original): A belt for a continuously variable transmission, in which a pair of left and right ring slots (35) defined in each of a large number of metal elements (32) are supported on a pair of left and right metal ring assemblies (31) each formed of a plurality of endless metal rings (33) laminated one on another, respectively, the belt being wound around a drive pulley (6) and a driven pulley (11) to transmit a driving force,

said metal element (32) comprising

a neck (36) provided between the pair of left and right ring slots (35),

an ear (37) integrally connected to an upper portion of the neck (36),

an element body (34) integrally connected to a lower portion of the neck (36),

a pair of left and right saddle surfaces (44) formed on an upper surface of the element body (34) to support a lower surface of the metal ring assembly (31),

a pair of left and right V-faces (39) formed at laterally opposite ends of the element body (34) to abut against both of said pulleys (6 and 11), and

a pair of left and right recesses (46) defined in a lower edge of the element body (34) and depressed upwards,

characterized in that when an upper end of the V-face (39) is represented by a; a lower end of the V-face (39) is represented by b; an inner end of the saddle surface (44) is represented by c; and an outer end of the saddle surface (44) is represented by d,

Do not enter
10/0263
inc

U.S. Patent Application Serial No. 09/926,158
September 26, 2003 Reply to June 26, 2003 Office Action

a first line (S1) on the lower edge of the element body (34) is determined, and a second line (S2) straightforwardly connecting the lower end b of the V-face (39) and the inner end c of the saddle surface (44) is determined, so that when a downward load is applied from the metal ring assembly (31) to the outer end d of the saddle surface (44), the folding-resistant strength of the element body (34) is uniform laterally; and

a position of the recess (46) is determined in the vicinity of a point e of intersection of the first and second lines (S1 and S2), the lower edge of the element body (34) being defined by said first line (S1) inside the recess (46) and by said second line (S2) outside the recess (46).

2 (original): A belt for a continuously variable transmission according to claim 1, wherein a triangle formed by the upper end a of the V-face (39), the lower end b of the V-face (39) and the inner end c of the saddle surface (44) is an isosceles triangle in which the lengths of a side ca and a side cb are equal to each other.

3 (currently amended): A belt for a continuously variable transmission, in which a pair of left and right ring slots (35) defined in each of a large number of metal elements (32) are supported on a pair of left and right metal ring assemblies (31) each formed of a plurality of endless metal rings (33) laminated one on another, respectively, the belt being wound around a drive pulley (6) and a driven pulley (11) to transmit a driving force,

said metal element (32) comprising

a neck (36) provided between the pair of left and right ring slots (35),

an ear (37) integrally connected to an upper portion of the neck (36),

an element body (34) integrally connected to a lower portion of the neck (36),

a pair of left and right saddle surfaces (44) formed on an upper surface of the element body (34) to support a lower surface of the metal ring assembly (31),

a pair of left and right V-faces (39) formed at laterally opposite ends of the element body (34) to abut against both of said pulleys (6 and 11), and

a pair of left and right recesses (46) defined in a lower edge of the element body (34) and depressed upwards,

characterized in that when an upper end of the V-face (39) is represented by a; a lower end of the V-shaped V-face (39) is represented by b; an inner end of the saddle surface (44) is represented by c; and an outer end of the saddle surface (44) is represented by d,

a first line (S1) on the lower edge of the element body (34) is defined by

$$(Y = Y_r \times \sqrt{\{(L - X) / L\}})$$

with Y representing the vertical distance from the first line (S1) to the saddle surface (44) at a given lateral coordinate X from a reference point and Y_r representing the vertical distance at the lateral reference point, and a second line (S2) straightforwardly connecting the lower end b of the V-face (39) and the inner end c of the saddle surface (44) is determined, so that when a downward load is

U.S. Patent Application Serial No. 09/926,158

September 26, 2003 Reply to June 26, 2003 Office Action

applied from the metal ring assembly (31) to the outer end d of the saddle surface (44), the folding-

resistant strength of the element body (34) is uniform laterally; and

a position of the recess (46) is determined in the vicinity of a point e of intersection of the first and second lines (S1 and S2), the lower edge of the element body (34) being defined by said first line (S1) inside the recess (46) and by said second line (S2) outside the recess (46).